INDEX TO AUTHORS

BARNARD, JAMES H. See COOKE, BARNARD, HEBALD, and STULL, 733

BARNES, L. A., and WIGHT, ELEANOR C. Serological relationship between Pneumococcus Type I and an encapsulated strain of *Escherichia coli*, 281

BAUER, JOHANNES H. See DUBOS and BAUER, 271

BEARD, J. W. See ROUS and BEARD, 523

BIDWELL, EMILY H. See TURNER and BIDWELL, 721

CASTANEDA, M. RUIZ. The antigenic relationship between *Bacillus proteus* X19 and rickettsiae. III. A study of the antigenic composition of the extracts of *Bacillus proteus* X19, 289

CHOW, BACON F., and GOEBEL, WALTHER F. The purification of the antibodies in Type I antipneumococcus serum, and the chemical nature of the type specific precipitin reaction, 179

CLAUDE, ALBERT. Spreading property of azo proteins in the dermis, 229

CLOW, ANNA D. See WEBSTER, FITE, and CLOW, 827

COBURN, ALVIN F., and PAULI, RUTH H. Studies on the immune response of the rheumatic subject and its relationship to activity of the rheumatic process. I. The determination of antistreptolysin titer, 129

COBURN, ALVIN F., and PAULI, RUTH H. Studies on the immune response of the rheumatic subject and its relationship to activity of the rheumatic process. II. Observations on an epidemic of influenza followed by hemolytic streptococcus infections in a rheumatic colony, 137

— and —. III. Observations on the reactions of a rheumatic group to an epidemic infection with hemolytic streptococcus of a single type, 159

COOKE, ROBERT A., BARNARD, JAMES H., HEBALD, SELIAN, and STULL, ARTHUR. Serological evidence of immunity with coexisting sensitization in a type of human allergy (hay fever), 733

DRESSER, RICHARD. See MACCHIAVELLO and DRESSER, 297

DRINKER, CECIL K., ENDERS, JOHN F., SHAFFER, MORRIS F., and LEIGH, OCTA C. The emigration of pneumococci Type III from the blood into the thoracic duct lymph of rabbits, and the survival of these organisms in the lymph following intravenous injection of specific antiserum, 849

DUBOS, RENÉ. Studies on the mechanism of production of a specific bacterial enzyme which decomposes the capsular polysaccharide of Type III pneumococcus, 259

DUBOS, RENÉ, and BAUER, JOHANNES H. The use of graded collodion membranes for the concentration of a bacterial enzyme capable of decomposing the capsular polysaccharide of Type III pneumococcus, 271

DURAN-REYNALS, F. See THOMAS and DURAN-REYNALS, 39

ENDERS, JOHN F. See DRINKER, ENDERS, SHAFFER, and LEIGH, 849

ENZMANN, E. V. See PINCUS and ENZMANN, 665

FARRAR, GEORGE E., JR. See STURGIS and FARRAR, 457

FITE, GEORGE L. See WEBSTER, FITE, and CLOW, 827

FLEXNER, SIMON. The effects of nasally instilled virus of poliomyelitis on the cerebrospinal fluid and the blood of monkeys, 787

FRANCIS, THOMAS, JR., and MAGILL, T. P. Immunological studies with the virus of influenza, 505

— and —. Rift Valley fever. A report of three cases of laboratory infection and the experimental transmission of the disease to ferrets, 433

GOEBEL, WALTHER F. See CHOW and GOEBEL, 179

GOODNER, KENNETH, and HORSFALL, FRANK L., JR. The protective action of Type I antipneumococcus serum in mice. I. The quantitative aspects of the mouse protection test, 359

— and MILLER, D. K. The protective action of Type I antipneumococcus serum in mice. II. The course of the infectious process, 375

— and —. III. The significance of certain host factors, 393

GOODNER, KENNETH. See HORSFALL and GOODNER, 485

GREENE, HARRY S. N. Rabbit pox. IV. Susceptibility as a function of constitutional factors, 305

GUNTHER, ANNE. See WELD and GUNTHER, 119

HAWKINS, W. B., and WHIPPLE, G. H. Bile fistulas and related abnormalities. Bleeding, osteoporosis, cholelithiasis, and duodenal ulcers, 599

HEBALD, SELIAN. See COOKE, BARNARD, HEBALD, and STULL, 733

HEIDELBERGER, MICHAEL, and KENDALL, FORREST E. A quantitative theory of the precipitin reaction. II. A study of an azo protein-antibody system, 467

— and —. III. The reaction between crystalline egg albumin and its homologous antibody, 697

HORSFALL, FRANK L., JR., and GOODNER, KENNETH. Lipoids and immunological reactions. I. The relation of phospholipins to the type specific reactions of antipneumococcus horse and rabbit sera, 485

—. See GOODNER and HORSFALL, 359

HU, CH'UAN-K'UEI. See ROSAHN and HU, 331

HUGHES, THOMAS P., PARKER, ROBERT F., and RIVERS, THOMAS M. Immunological and chemical investigations of vaccine virus. II. Chemical analysis of elementary bodies of vaccinia, 349

HURST, E. WESTON. See TENBROECK, HURST, and TRAUB, 677

JULIANELLE, L. A., and WIEGHARD, C. W. The immunological specificity of staphylococci. I. The occurrence of serological types, 11

JULIANELLE, L. A., and WIEGHARD, C. W. The immunological specificity of staphylococci. III. Interrelationships of cell constituents, 31

—. See WIEGHARD and JULIANELLE, 23

JUNGEBLUT, CLAUS W. Inactivation of poliomyelitis virus *in vitro* by crystalline vitamin C (ascorbic acid), 517

KENDALL, FORREST E. See HEIDELBERGER and KENDALL, 467, 697

KUTTNER, ANN G., and T'UNG, T'SUN. Further studies on the submaxillary gland viruses of rats and guinea pigs, 805

LEIGH, OCTA C. See DRINKER, ENDERS, SHAFFER, and LEIGH, 849

LINDBERGH, C. A. An apparatus for the culture of whole organs, 409

MACCHIAVELLO, ATILIO, and DRESSER, RICHARD. A modified method of obtaining large amounts of *Rickettsia prowazeki* by Roentgen irradiation of rats, 297

MAGILL, T. P. See FRANCIS and MAGILL, 433, 505

MARTIN, DONALD S. See SPRUNT, MARTIN, and WILLIAMS, 73, 449

MCEWEN, CURRIER, and SWIFT, HOMER F. Cutaneous reactivity of immune and hypersensitive rabbits to intradermal injections of homologous indifferent streptococcus and its fractions, 573

MCNAUGHT, JAMES B., WOODS, FRANCIS M., and SCOTT, VIRGIL. Bartonella bodies in the blood of a nonsplenectomized dog, 353

MERRILL, MALCOLM H., and TENBROECK, CARL. The transmission of equine encephalomyelitis virus by *Aëdes aegypti*, 687

MILLER, D. K. See GOODNER and MILLER, 375, 393

MUENCH, HUGO. A note on the evaluation of the results of mouse tests of sera. See WEBSTER, FITE, and CLOW, 827

NETER, ERWIN. See WITEBSKY and NETER, 589

ORCUTT, MARION L., and SHOPE, RICHARD E. The distribution of swine influenza virus in swine, 823

PARKER, ROBERT F., and RIVERS, THOMAS M. Immunological and chemical investigations of vaccine virus. I. Preparation of elementary bodies of vaccinia, 65

—. See HUGHES, PARKER, and RIVERS, 349

PAUL, JOHN R., TRASK, JAMES D., and WEBSTER, LESLIE T. Isolation of poliomyelitis virus from the nasopharynx, 245

PAULI, RUTH H. See COBURN and PAULI, 129, 137, 159

PINCUS, GREGORY, and ENZMANN, E. V. The comparative behavior of mammalian eggs *in vivo* and *in vitro*. I. The activation of ovarian eggs, 665

RIVERS, THOMAS M., and WARD, S. M. Jennerian prophylaxis by means of intradermal injections of culture vaccine virus, 549

—. See HUGHES, PARKER, and RIVERS, 349

—. See PARKER and RIVERS, 65

ROSAHN, PAUL D. The influence of latent syphilitic infection on the reaction of the rabbit to the Brown-Pearce tumor, 213
— and HU, CH'UAN-K'UEI. Rabbit pox. Report of an epidemic, 331
ROUS, PEYTON, and BEARD, J. W. The progression to carcinoma of virus-induced rabbit papillomas (Shope), 523

SABIN, F. R., SMITHBURN, KENNETH C., and THOMAS, R. M. Cellular reactions to waxes from *Mycobacterium leprae*, 771
—, —, and —. Cellular reactions to wax-like materials from acid-fast bacteria. The unsaponifiable fraction from the tubercle bacillus, Strain H-37, 751
SCOTT, VIRGIL. See MCNAUGHT, WOODS, and SCOTT, 353
SEASTONE, C. V. Pathogenic organisms of the genus *Listerella*, 203
SHAFFER, MORRIS F. See DRINKER, ENDERS, SHAFFER, and LEIGH, 849
SHOPE, RICHARD E. Experiments on the epidemiology of pseudorabies. I. Mode of transmission of the disease in swine and their possible rôle in its spread to cattle, 85
—. II. Prevalence of the disease among middle western swine and the possible rôle of rats in herd to herd infections, 101
—. The infection of mice with swine influenza virus, 561
—. See ORCUTT and SHOPE, 823
SHWARTZMAN, GREGORY. The phenomenon of local skin reactivity to bacterial filtrates: elicitation of local reactivity by way of the vascular system, 621
SMITHBURN, KENNETH C. The colony morphology of tubercle bacilli. III. The relation between virulence and colony form, 645
SMITHBURN, KENNETH C. See SABIN, SMITHBURN, and THOMAS, 751, 771
SPRUNT, DOUGLAS H., MARTIN, DONALD S., and WILLIAMS, JARRETT E. Interstitial bronchopneumonia. I. Similarity of a toxin pneumonia to that produced by the viruses, 73
—, —, and —. II. Production of interstitial mononuclear pneumonia by the Bordet-Gengou bacillus, 449
STULL, ARTHUR. See COOKE, BARNARD, HEBALD, and STULL, 733
STURGIS, CYRUS C., and FARRAR, GEORGE E., JR. Hemoglobin regeneration in the chronic hemorrhagic anemia of dogs (Whipple). I. The effect of iron and protein feeding, 457
SWIFT, HOMER F. See MCEWEN and SWIFT, 573

TENBROECK, CARL, HURST, E. WESTON, and TRAUB, ERICH. Epidemiology of equine encephalomyelitis in the eastern United States, 677
—. See MERRILL and TENBROECK, 687
THOMAS, R. M., and DURAN-REYNALS, F. The degree of dispersion of the bacillus as a factor in infection and resistance in experimental tuberculosis, 39
—. See SABIN, SMITHBURN, and THOMAS, 751, 771
TORBERT, HAROLD C. The effect of fasting on the serum protein concentration of the rat. With special reference to the question of the existence of an immediately utilizable circulating protein fraction, 1
TRASK, JAMES D. See PAUL, TRASK, and WEBSTER, 245

TRAUB, ERICH. See TENBROECK, HURST, and TRAUB, 677
T'UNG, T'SUN. See KUTTNER and T'UNG, 805
TURNER, KENNETH B., and BIDWELL, EMILY H. Further observations on the blood cholesterol of rabbits in relation to atherosclerosis, 721

WARD, S. M. See RIVERS and WARD, 549
WEBSTER, LESLIE T., FITE, GEORGE L., and CLOW, ANNA D. Experimental studies on encephalitis. IV. Specific inactivation of virus by sera from persons exposed to encephalitis, St. Louis type, 1933. With a note on the evaluation of the results of mouse tests of sera by Hugo Muench, 827
—. See PAUL, TRASK, and WEBSTER, 245
WELD, JULIA T., and GUNTHER, ANNE. Effect of anaerobically prepared pneumococcus autolysate toxin on mice and evaluation of pneumococcus autolysate antitoxin in mice, 119
WHIPPLE, G. H. See HAWKINS and WHIPPLE, 599
WIEGHARD, C. W., and JULIANELLE, L. A. The immunological specificity of staphylococci. II. The chemical nature of the soluble specific substances, 23
—. See JULIANELLE and WIEGHARD, 11, 31
WIGHT, ELEANOR C. See BARNES and WIGHT, 281
WILLIAMS, JARRETT E. See SPRUNT, MARTIN, and WILLIAMS, 73, 449
WITEBSKY, ERNST, and NETER, ERWIN. Distribution of blood group properties and blood group property-destroying factors in the intestinal tract of man, 589
WOODS, FRANCIS M. See MCNAUGHT, WOODS, and SCOTT, 353

INDEX TO SUBJECTS

ACID fastness, bacteria, cellular reactions to wax-like materials from, 751
Aëdes aegypti, transmission of equine encephalomyelitis virus, 687
Albumin, egg, crystalline, and homologous antibody, reaction between, 697
Allergy, human, serological evidence of immunity with coexisting sensitization, 733
Anaerobically prepared pneumococcus autolysate toxin, effect on mice, 119
Anemia, dog, chronic hemorrhagic, (Whipple), effect of iron feeding on hemoglobin regeneration, 457
—, —, — —, (Whipple), effect of protein feeding on hemoglobin regeneration, 457
Antibodies, Type I antipneumococcus serum, purification, 179
Antibody, homologous, and crystalline egg albumin, reaction between, 697
Antibody-azo protein system, 467
Antigenic composition of *Bacillus proteus* X 19 extracts, 289
— relationship between *Bacillus proteus* X 19 and rickettsiae, 289
Antipneumococcus serum. *See* Serum.
Antiserum, specific, intravenous injection, survival of pneumococci Type III in lymph following, 849
Antistreptolysin titer, determination, 129
Antitoxin, pneumococcus autolysate, evaluation in mice, 119
Ascorbic acid, *in vitro* inactivation of poliomyelitis virus, 517
Atherosclerosis and blood cholesterol, relation, 721
Autolysate, pneumococcus, antitoxin, evaluation in mice, 119
—, —, toxin, anaerobically prepared, effect on mice, 119
Azo protein-antibody system, 467
— proteins in dermis, spreading property, 229

BACILLUS, Bordet-Gengou, producing interstitial mononuclear pneumonia, 449
—, degree of dispersion as factor in infection and resistance in tuberculosis, 39
— *proteus* X 19 extracts, antigenic composition, 289
— — — and rickettsiae, antigenic relationship, 289
— *tuberculosis*, colony morphology, 645
— —, Strain H-37, unsaponifiable fraction, cellular reactions to, 751
Bacteria, acid-fast, cellular reactions to wax-like materials from, 751
Bacterial enzyme capable of decomposing Type III pneumococcus capsular polysaccharide, use of graded collodion membranes for concentration, 271
— —, specific, decomposing Type III pneumococcus capsular polysaccharide, mechanism of production, 259
— filtrates, local skin reactivity, 621
Bartonella bodies in blood of nonsplenectomized dog, 353

Bile fistulas and related abnormalities, 599
Bleeding related to bile fistulas, 599
Blood cholesterol in relation to atherosclerosis, 721
—, emigration of pneumococci Type III into thoracic duct lymph from, 849
— group properties in intestinal tract of man, 589
— — property-destroying factors in intestinal tract of man, 589
—, monkey, effects of nasally instilled poliomyelitis virus on cerebrospinal fluid and, 787
—, non-splenectomized dog, bartonella bodies, 353
Bordet-Gengou bacillus producing interstitial mononuclear pneumonia, 449
Bronchopneumonia, interstitial, 73, 449
Brown-Pearce tumor, influence of latent syphilitic infection on reaction, 213

CANCER, progression of virus-induced rabbit papillomas (Shope) to, 523
Carcinoma. *See* Cancer.
Cattle, rôle of swine in spread of pseudorabies to, 85
Cell constituents of staphylococci, interrelationships, 31
Cellular reactions to unsaponifiable fraction from tubercle bacillus, Strain H-37, 751
— — — waxes from *Mycobacterium leprae*, 771
— — — wax-like materials from acid-fast bacteria, 751
Cerebrospinal fluid, monkey, effects of nasally instilled poliomyelitis virus on blood and, 787
Chemical analysis of elementary bodies of vaccinia, 349
— and immunological investigations of vaccine virus, 65, 349
Chemistry, soluble specific substances of staphylococci, 23
—, type specific precipitin reaction with Type I antipneumococcus serum, 179
Cholelithiasis related to bile fistulas, 599
Cholesterol, blood, in relation to atherosclerosis, 721
Collodion membranes, graded, for concentration of bacterial enzyme capable of decomposing Type III pneumococcus capsular polysaccharide, 271
Cultivation of whole organs, apparatus, 409
—, vaccine virus, Jennerian prophylaxis by intradermal injections, 549

DUODENAL ulcers related to bile fistulas, 599

EGG albumin, crystalline, and homologous antibody, reaction between, 697
Eggs, mammalian, *in vivo* and *in vitro*, comparative behavior, 665
—, ovarian, activation, 665
Encephalitis, 827
—, St. Louis type, 1933, specific inactivation of virus by sera from persons exposed to, 827
Encephalomyelitis, equine, epidemiology in eastern United States, 677
— virus, equine, transmission by *Aëdes aegypti*, 687
Enzyme, bacterial, capable of decomposing Type III pneumococcus capsular polysaccharide, use of graded collodion membranes for concentration, 271
—, specific bacterial, decomposing Type III pneumococcus capsular polysaccharide, mechanism of production, 259

Epidemic infection with single type of hemolytic streptococcus, reactions of rheumatic group, 159
— influenza followed by hemolytic streptococcus infections in rheumatic colony, 137
— rabbit pox, 331
Epidemiology, equine encephalomyelitis in eastern United States, 677
—, pseudorabies, 85, 101
Escherichia coli, encapsulated strain, and Pneumococcus Type I, serological relationship, 281
Extracts, *Bacillus proteus* X 19, antigenic composition, 289

FASTING, effect on serum protein concentration, with special reference to existence of immediately utilizable circulating protein fraction, 1
Fever, hay. *See* Hay fever.
—, Rift Valley. *See* Rift Valley fever.
Filtrates, bacterial, local skin reactivity, 621
Fistulas, bile, and related abnormalities, 599
Fluid, cerebrospinal, monkey, effects of nasally instilled poliomyelitis virus on blood and, 787

GLAND, submaxillary, of guinea pigs, viruses, 805
—, —, of rats, viruses, 805

HAY fever, serological evidence of immunity with coexisting sensitization, 733
Hemoglobin regeneration in chronic hemorrhagic anemia of dogs (Whipple), effect of iron feeding, 457
— — — chronic hemorrhagic anemia of dogs (Whipple), effect of protein feeding, 457
Hemolytic streptococcus infections in rheumatic colony following epidemic influenza, 137
— —, single type, reactions of rheumatic group to epidemic infection, 159
Hemorrhagic anemia, chronic, dog, (Whipple), effect of iron feeding on hemoglobin regeneration, 457
— —, —, —, (Whipple), effect of protein feeding on hemoglobin regeneration, 457
Homologous antibody and crystalline egg albumin, reaction between, 697
— indifferent streptococcus and fractions, intradermal injections, cutaneous reactivity of hypersensitive rabbits, 573
— — — and fractions, intradermal injections, cutaneous reactivity of immune rabbits, 573
Horse, encephalomyelitis, epidemiology in eastern United States, 677
— — virus, transmission by *Aëdes aegypti*, 687
— and rabbit sera, antipneumococcus, type specific reactions, relation of phospholipins, 485
Hypersensitivity, cutaneous reactivity to intradermal injections of homologous indifferent streptococcus and its fractions, 573

IMMUNE response of rheumatic subject, relationship to activity of rheumatic process, 129, 137, 159
Immunity with coexisting sensitization in human allergy (hay fever), serological evidence, 733
Immunization, cutaneous reactivity to intradermal injections of homologous indifferent streptococcus and its fractions, 573
Immunological and chemical investigations of vaccine virus, 65, 349

Immunological reactions and lipoids, 485
— specificity of staphylococci, chemical nature of soluble specific substances, 23
— — — —, interrelationships of cell constituents, 31
— — — —, occurrence of serological types, 11
Immunology, influenza virus, 505
Influenza, epidemic, followed by hemolytic streptococcus infections in rheumatic colony, 137
—, swine, distribution of virus in swine, 823
— virus, immunological studies, 505
— —, swine, infection of mice, 561
Intestinal tract of man, blood group properties, 589
— — — —, blood group property-destroying factors, 589
In vitro inactivation of poliomyelitis virus by ascorbic acid, 517
— — — of poliomyelitis virus by crystalline vitamin C, 517
— — and *in vivo* behavior of mammalian eggs, comparison, 665
In vivo and *in vitro* behavior of mammalian eggs, comparison, 665
Iron feeding, effect on hemoglobin regeneration in chronic hemorrhagic anemia of dogs (Whipple), 457
Irradiation, Roentgen, of rats, for obtaining large amounts of *Rickettsia prowazeki*, 297

JENNERIAN prophylaxis by intradermal injections of culture vaccine virus, 549

LIPOIDS and immunological reactions, 485
Listerella, pathogenic organisms, 203
Lymph, survival of pneumococci Type III following intravenous injection of specific antiserum, 849
—, thoracic duct, emigration of pneumococci Type III from blood into, 849

MAMMALIAN eggs *in vivo* and *in vitro*, comparative behavior, 665
Man, allergy (hay fever), serological evidence of immunity with coexisting sensitization, 733
Membranes, graded collodion, for concentration of bacterial enzyme capable of decomposing Type III pneumococcus capsular polysaccharide, 271
Morphology, tubercle bacillus colony, 645
Mycobacterium leprae, cellular reactions to waxes from, 771

NASOPHARYNX, isolation of poliomyelitis virus, 245
Nose, effects of nasally instilled poliomyelitis virus on cerebrospinal fluid and blood of monkeys, 787

ORGANS, whole, culture, apparatus, 409
Osteoporosis related to bile fistulas, 599
Ovarian eggs, activation, 665

PAPILLOMAS, rabbit, (Shope), virus-induced, progression to carcinoma, 523
Pathogenic organisms of genus *Listerella*, 203
Phospholipins and type specific reactions of antipneumococcus horse and rabbit sera, relation, 485

Pneumococci Type III, emigration from blood into thoracic duct lymph, 849
— — —, survival in lymph following intravenous injection of specific antiserum, 849
Pneumococcus autolysate antitoxin, evaluation in mice, 119
— — toxin, anaerobically prepared, effect on mice, 119
— Type I and encapsulated strain of *Escherichia coli*, serological relationship, 281
— — III capsular polysaccharide, graded collodion membranes for concentration of bacterial enzyme capable of decomposing, 271
— — — capsular polysaccharide, mechanism of production of specific bacterial enzyme decomposing, 259
Pneumonia, interstitial, mononuclear, production by Bordet-Gengou bacillus, 449
—, toxin, similarity to that produced by viruses, 73
—, virus, similarity of toxin pneumonia, 73
Poliomyelitis virus, inactivation *in vitro* by ascorbic acid, 517
— —, — *in vitro* by crystalline vitamin C, 517
— —, isolation from nasopharynx, 245
— —, nasally instilled, effects on cerebrospinal fluid and blood of monkeys, 787
Polysaccharide, Type III pneumococcus, capsular, graded collodion membranes for concentration of bacterial enzyme capable of decomposing, 271
—, — — —, capsular, mechanism of production of specific bacterial enzyme decomposing, 259
Precipitin reaction, quantitative theory, 467, 697
Precipitin reaction, type specific, with Type I antipneumococcus serum, chemical nature, 179
Prophylaxis, Jennerian, by intradermal injections of culture vaccine virus, 549
Protein, azo, antibody system, 467
— feeding, effect on hemoglobin regeneration in chronic hemorrhagic anemia of dogs (Whipple), 457
—, serum, concentration, effect of fasting, with special reference to existence of immediately utilizable circulating protein fraction, 1
—, —, immediately utilizable circulating fraction, effect of fasting, 1
Proteins, azo, spreading property in dermis, 229
Pseudorabies, epidemiology, 85, 101
— in middle western swine, possible rôle of rats in herd to herd infections, 101
—, prevalence in middle western swine, 101
—, transmission in swine, 85

RABBIT pox, epidemic, 331
— —, susceptibility as function of constitutional factors, 305
Rats, possible rôle in herd to herd infections of middle western swine with pseudorabies, 101
Reaction, precipitin, quantitative theory, 467, 697
—, —, type specific, with Type I antipneumococcus serum, chemical nature, 179
Rheumatic colony, epidemic influenza followed by hemolytic streptococcus infections, 137
— group, reactions to epidemic infection with single type of hemolytic streptococcus, 159

Rheumatic process, activity, relationship of immune response of rheumatic subject, 129, 137, 159
— subject, relationship of immune response to activity of rheumatic process, 129, 137, 159
Rickettsia prowazeki, large amounts obtained by Roentgen irradiation of rats, 297
Rickettsiae and *Bacillus proteus* X19, antigenic relationship, 289
Rift Valley fever, three cases of laboratory infection, 433
— — —, transmission to ferrets, 433
Roentgen irradiation of rats, for obtaining large amounts of *Rickettsia prowazeki*, 297

ST. LOUIS type encephalitis, 1933, specific inactivation of virus by sera from persons exposed to, 827
Sensitization in human allergy (hay fever), coexisting with immunity, serological evidence, 733
Sera, antipneumococcus horse and rabbit, type specific reactions, relation of phospholipins, 485
— from persons exposed to encephalitis, St. Louis type, 1933, specific inactivation of virus by, 827
Serological evidence of immunity with coexisting sensitization in human allergy (hay fever), 733
— types of staphylococci, 11
Serology, Pneumococcus Type I and encapsulated strain of *Escherichia coli*, relation, 281
Serum, Antipneumococcus Type I, protective action, course of infectious process, 375
—, — — —, protective action, quantitative aspects of mouse protection test, 359
—, — — —, protective action, significance of certain host factors, 393
Serum, Antipneumococcus Type I, purification of antibodies, 179
— protein concentration, effect of fasting, with special reference to existence of immediately utilizable circulating protein fraction, 1
Shope rabbit papillomas, virus-induced, progression to carcinoma, 523
Skin injections of homologous indifferent streptococcus and its fractions, reactivity of hypersensitive rabbits, 573
— — — homologous indifferent streptococcus and its fractions, reactivity of immune rabbits, 573
—, Jennerian prophylaxis by injections of culture vaccine virus, 549
— reactivity, local, to bacterial filtrates, 621
— — of hypersensitive rabbits to intradermal injections of homologous indifferent streptococcus and its fractions, 573
— — — immune rabbits to intradermal injections of homologous indifferent streptococcus and its fractions, 573
—, spreading property of azo proteins, 229
Specific antiserum, intravenous injection, survival of pneumococci Type III in lymph following, 849
— bacterial enzyme decomposing Type III pneumococcus capsular polysaccharide, mechanism of production, 259
— inactivation of virus by sera from persons exposed to encephalitis, St. Louis type, 1933, 827
— substances, soluble, of staphylococci, chemical nature, 23
—, type, precipitin reaction with Type I antipneumococcus serum, chemical nature, 179

Specific, type, reactions of antipneumococcus horse and rabbit sera, relation of phospholipins, 485
Specificity, immunological, of staphylococci, chemical nature of soluble specific substances, 23
—, —, — —, interrelationships of cell constituents, 31
—, —, — —, occurrence of serological types, 11
Splenectomy, bartonella bodies in blood of dog without, 353
Staphylococci, immunological specificity, chemical nature of soluble specific substances, 23
—, — —, interrelationships of cell constituents, 31
—, — —, occurrence of serological types, 11
Streptococcus, hemolytic, single type, reactions of rheumatic group to epidemic infection, 159
—, homologous indifferent, and its fractions, cutaneous reactivity of hypersensitive rabbits to intradermal injections, 573
—, — —, and its fractions, cutaneous reactivity of immune rabbits to intradermal injections, 573
— infections, hemolytic, in rheumatic colony, following epidemic influenza, 137
Streptolysin, anti-, titer, determination, 129
Submaxillary gland. *See* Gland.
Susceptibility as function of constitutional factors in rabbit pox, 305
Swine influenza virus, distribution in swine, 823
— — —, infection of mice, 561
—, middle western, herd to herd infections with pseudorabies, possible rôle of rats, 101
—, — —, prevalence of pseudorabies, 101
—, possible rôle in spread of pseudorabies to cattle, 85
Swine, transmission of pseudorabies, 85
Syphilitic infection, latent, influence on reaction to Brown-Pearce tumor, 213

THORACIC duct lymph, emigration of pneumococci Type III from blood into, 849
Toxin, pneumococcus autolysate, anaerobically prepared, effect on mice, 119
— pneumonia, similarity to that produced by viruses, 73
Transmission, equine encephalomyelitis virus by *Aëdes aegypti*, 687
—, pseudorabies in swine, 85
—, Rift Valley fever, to ferrets, 433
Tuberculosis bacillus, colony morphology, 645
— —, Strain H-37, unsaponifiable fraction, cellular reactions to, 751
—, degree of dispersion of bacillus as factor in infection and resistance, 39
Tumor, Brown-Pearce, influence of latent syphilitic infection on reaction, 213

ULCERS, duodenal, related to bile fistulas, 599
United States, eastern, epidemiology of equine encephalomyelitis, 677

VACCINE virus, culture, Jennerian prophylaxis by intradermal injections, 549
— —, immunological and chemical investigations, 65, 349
Vaccinia, elementary bodies, chemical analysis, 349
—, — —, preparation, 65
Virulence and colony form of tubercle bacilli, relation, 645

Virus, equine encephalomyelitis, transmission by *Aëdes aegypti*, 687
—, influenza, immunological studies, 505
— pneumonia, similarity of toxin pneumonia, 73
—, poliomyelitis, inactivation *in vitro* by ascorbic acid, 517
—, —, — *in vitro* by crystalline vitamin C, 517
—, —, isolation from nasopharynx, 245
—, —, nasally instilled, effects on cerebrospinal fluid and blood of monkeys, 787
—, specific inactivation by sera from persons exposed to encephalitis, St. Louis type, 1933, 827
—, swine influenza, distribution in swine, 823
—, — —, infection of mice, 561
—, vaccine, culture, Jennerian prophylaxis by intradermal injections, 549
Virus, vaccine, immunological and chemical investigations, 65, 349
Viruses, submaxillary gland, of guinea pigs, 805
—, — —, of rats, 805
Virus-induced rabbit papillomas (Shope), progression to carcinoma, 523
Vitamin C, crystalline, *in vitro* inactivation of poliomyelitis virus, 517

WAXES from *Mycobacterium leprae*, cellular reactions, 771
Wax-like materials from acid-fast bacteria, cellular reactions, 751
Whipple's chronic hemorrhagic anemia of dogs, effect of iron feeding on hemoglobin regeneration, 457
— — — — of dogs, effect of protein feeding on hemoglobin regeneration, 457